

WHAT IS CLAIMED IS:

1. A method for discriminating recording medium for discriminating the kind thereof, comprising the steps of:

5 generating image information containing information corresponding to each of plural pixels included in a specific area on the surface of a recording medium as image information indicating the surface condition of said recording medium;

10 obtaining a first parameter regarding the surface roughness of said recording medium from said image information;

 obtaining a second parameter regarding the surface configuration of said recording medium from

15 said image information; and

 discriminating the kind of said recording medium on the basis of said first parameter and said second parameter.

20 2. A method for discriminating recording medium according to Claim 1, wherein said image information contains the brightness information of each of said plural pixels, and said first parameter is obtainable from said brightness information, and relates to the

25 magnitude of unevenness on the surface of said recording medium.

3. A method for discriminating recording medium according to Claim 1, wherein said image information contains the brightness information of each of said plural pixels, and said second parameter is

5 obtainable corresponding to the changes in said brightness information along the arrangement of said plural continuous pixels, and relates to the cycle of unevenness on the surface of said recording medium.

10 4. A method for discriminating recording medium for discriminating the kind thereof, comprising the steps of:

generating image information composed by plural pixels corresponding to a specific area on the
15 surface of a recording medium, and containing the brightness information corresponding to each of said plural pixels as image information indicating the surface condition of said recording medium;

obtaining a first parameter by statistical
20 process in accordance with said brightness information;

obtaining a second parameter regarding changes in said brightness information along the arrangement of said plural continuous pixels; and

25 discriminating the kind of said recording medium on the basis of said first parameter and said second parameter.

5. A method for discriminating recording medium according to Claim 4, wherein said first parameter is either one of the brightness difference between the maximum value and the minimum value of said
5 brightness information, the mean value of said brightness information, and the brightness at the peak of histogram prepared from said plural pixels.

6. A method for discriminating recording medium
10 according to Claim 5, wherein said mean value of brightness information is either the arithmetic mean value of the maximum value and the minimum value of said brightness information or the arithmetic mean value of the respective brightness information of
15 said plural pixels.

7. A method for discriminating recording medium according to Claim 4, wherein said second parameter is obtainable on the basis of the binary data
20 prepared by binarizing said image information, being either one of the number of inversions of the values of adjacent pixels in said binary data, the run-length coded amount at the time of allocating codes to said binary data in accordance with the run-length
25 coding, and the number of isolated pixels discriminated as isolated pixels on the basis of the values of adjacent pixels on both sides in accordance

with said binary data.

8. A method for discriminating recording medium according to Claim 7, wherein a threshold value used
5 for said binarizing process is either the mean value of said brightness information or the brightness at the peak of the histogram prepared from said plural pixels.

10 9. A method for discriminating recording medium according to Claim 4, wherein said second parameter is the number of changes of plus/minus signs of adjacent pixels.

15 10. A method for discriminating recording medium according to Claim 4, wherein said discriminating process discriminates the kind of said recording medium by use of a table in which said first and second parameters and the kind of said
20 recording medium are correlated.

11. A method for discriminating recording medium according to Claim 4, wherein said discriminating process discriminates the kind of said
25 recording medium on the basis of plural threshold values corresponding to said first parameter and said second parameter, respectively.

12. A method for discriminating recording medium according to Claim 11, wherein said plural threshold values are values determined on the basis of the distributions said first parameter and said second parameter can exhibit per kind of said recording medium.

13. A method for discriminating recording medium according to Claim 4, wherein a plain sheet and a coated sheet are discriminated on the basis of said first parameter and said second parameter.

14. A method for discriminating recording medium according to Claim 13, the threshold value of said second parameter for discriminating a glossy film and a glossy sheet is larger than the threshold value of said second parameter for discriminated said glossy sheet and said coated sheet.

15. A method for discriminating recording medium according to Claim 4, wherein said step of generating the image information obtains said image information by picking up an image regarding a specific area on said recording medium.

25

16. A method for discriminating recording medium according to Claim 4, wherein said image

information is either one-dimensional image
information or two-dimensional image information.

17. A method for discriminating recording
5 medium according to Claim 16, wherein if said image
information generated is a two-dimensional image,
said step of generating the image information
converts it into one-dimensional image information.

10 18. A method for discriminating recording
medium for discriminating the kind thereof comprising
the steps of:

generating the image information composed by
plural pixels corresponding to a specific area on the
15 surface of a recording medium as image information
indicating the surface condition of said recording
medium;

obtaining as a parameter the number of pixels
at peak brightness in the histogram prepared by said
20 plural pixels; and

discriminating the kind of recording medium on
the basis of said parameter.

19. A method for discriminating recording
25 medium according to Claim 18, further comprising the
step of obtaining a parameter related to the
magnitude of the unevenness on the surface of said

recording medium from the brightness information of each of said plural pixels, wherein said discriminating step discriminates the kind of recording medium on the basis of said parameter and
5 the parameter related to the magnitude of the unevenness of the surface of said recording medium.

20. A recording apparatus for recording on a recording medium conveyed by conveying means in
10 accordance with recording data, comprising:

image information-generating means for generating image information composed by plural pixels corresponding to a specific area on the surface of the recording medium, and containing the
15 brightness information of each of said plural pixels as the image information indicating the surface condition of said recording medium conveyed by said conveying means; and

discriminating means for discriminating the
20 kind of said recording medium in accordance with a first parameter obtainable by statistical process on the basis of said brightness information, and a second parameter obtainable with respect to the changes in said brightness information along the
25 arrangement of said plural continuous pixels.